

CAPITAL FACILITIES ELEMENT

2007-2012

GOAL

Develop and implement the capital facilities plan for the City of Renton.

Purpose

The purpose of the Capital Facilities Plan is:

- to identify the new or expanded public facilities that will be needed to accommodate --at an established level of service--the growth projected to occur within the City of Renton in the first six years of the Comprehensive Plan; and
- to identify the sources of public financing for these public facilities.

Methods and Process

The Capital Facilities Plan relies heavily on the analyses and policies presented in the other seven elements of the Comprehensive Plan as well as in the Fire Department Master Plan, Comprehensive Park, Recreation and Open Space Plan, Long Range Wastewater Management Plan, Issaquah, Kent and Renton School District's Capital Improvement Plans, and City of Renton Annual Capital Improvements Plan. For detailed information and explanations concerning growth projections, land use determinations, existing facilities, level of service, etc., the reader must consult these documents. The Capital Facilities Plan incorporates by reference the information and analyses presented in these other documents and the annual updates to these plans concerning existing facilities and level of service standards.

Based on these other documents, the Capital Facilities Plan establishes policies for determining which public facilities should be built and how they should be paid for, and presents a six-year plan for the use of public funds toward building and funding the needed capital facilities. The process for arriving at the six-year plan involved identifying existing facilities and level of service standards and then applying the projected growth in residential population and employment to identify the needed capital facilities. The timing of the facilities was established through a combination of the requirements of the city's concurrency policy and the length of time it takes to implement the needed facility.

Type and Providers of Capital Facilities

For the purposes of complying with the requirements of the GMA, the Capital Facilities Plan proposes a six-year plan for the following capital facilities and providers:

transportation	City of Renton
domestic water	City of Renton
sanitary sewer	City of Renton
surface water	City of Renton
parks facilities	City of Renton
fire	City of Renton
police	City of Renton
economic development	City of Renton

GROWTH MANAGEMENT ACT

REQUIREMENTS

Passed by the legislature in 1990, the Growth Management Act establishes planning goals as well as specific content requirements to guide local jurisdictions in the development and adoption of comprehensive plans.

One of the thirteen planning goals stated in the Act is to:

Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards. (RCW 36.70A.020(12))

To this end, the Act requires that each comprehensive plan contains:

A capital facilities plan element consisting of: (a) An inventory of existing capital facilities owned by public entities, showing the locations and capacities of the capital facilities; (b) a forecast of the future needs for such capital facilities; (c) the proposed locations and capacities of expanded or new capital facilities; (d) at least a six-year plan that will finance such capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes; and (e) a requirement to reassess the land use element if probable funding falls short of meeting existing needs and to ensure that the land use element, capital facilities plan element, and financing plan within the capital facilities plan element are coordinated and consistent. (RCW 36.70A.070(3))

With respect to transportation facilities, the Act is more specific, requiring that:

...transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development and defining "concurrent with development" to mean "that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years." (RCW 36.70A.070(6))

The Act also requires that:

...cities shall perform their activities and make capital budget decisions in conformity with their comprehensive plans. (RCW 36.70A.120)

Administrative Regulations (WAC 365-195)

In support of the GMA legislation, state administrative regulations require that the Capital Facilities Plan consist of at least the following features (WAC 365-195-315(1)):

1. An inventory of existing capital facilities owned by public entities, showing the locations and capacities of the capital facilities.
2. A forecast of the future needs for such capital facilities.
3. The proposed locations and capacities of expanded or new capital facilities.
4. At least a six-year plan that will finance such capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes.

5. A reassessment of the land use element if probable funding falls short of meeting existing needs.

In the administrative regulations, the state recommends that in addition to transportation, concurrency should be sought for domestic water and sanitary sewer systems. (WAC 365-195-060(3))

Additionally, the regulations state that the planning for all elements, including the Capital Facilities Plan, should be undertaken with the goal of economic development in mind even though the Act does not mandate an economic development element for the plan. (WAC 365-195-060(2))

GROWTH PROJECTIONS

The Puget Sound Regional Council population and employment forecast growth for the City over the twenty-one-year interval from 2001 to 2022 is an increase of 9,723 households, and 33,600 jobs. Growth targets adopted by the Growth Management Planning Council anticipate 6,198 households and 27,597 jobs. Both forecast growth and targets are well within the City's estimated land capacity of 11,261 units and 32,240 jobs established through the Buildable Lands requirements of the Growth Management Act (GMA). Renton is planning for its regional share of forecast growth over the next 20 years at the high end of the range, and the adopted target at the low end of the range. In the first 9 years of growth management actual growth in Renton exceeded targets, but was within the range predicted by the forecast growth assumptions. With external factors, including the regional economy, state/federal transportation funding and the GMA regulatory environment remaining constant or improving, Renton's growth is anticipated to continue over the next 6 year planning cycle.

The following chart summarizes Renton's forecast growth, targets and land use capacity.

	City of Renton	Adjustment Reflecting Growth, Annexation, and Land Use Changes up to 2006	Estimated Growth Per Year (for the 16 years remaining in the target)	2007-2012 Capital Facilities Plan Estimates For City of Renton
Forecast Growth 2001-2022	9,723 units 33,600 jobs 22,266 population	None	463 units 1,600 jobs (21 yrs)	2,778 units 9,600 jobs
Growth Targets 2022	6,198 units 27,597 jobs 14,194 population	2,257 units 24,797 jobs	141 units 1,505 jobs	846 units 9300 jobs
Capacity established by Buildable Lands 2006-2022	11,261 units 32,240 jobs 25,788 population	12,192 units 28,589 jobs	NA	NA

For the purpose of developing a six-year capital facilities plan for the period from 2007 through 2012, an estimate was made as to the amount of the remaining 21-year growth to be realized during the six-year Capital Facilities Element planning cycle. After reviewing the projections and the underlying assumptions, it was determined that for planning purposes, the most prudent course was to assume a uniform allocation of the forecast growth and targets over the 21-year period, rather than trying to predict year by year economic cycles.

Renton's growth over the first years of growth management is occurring more rapidly than originally forecast. The estimate for 2001 was 48,456 persons however the actual population by April 1, 2001 was 51,140, exceeding forecast growth by 2,684 persons housed in 1,177 housing units over a 6 year period (196 units per year). By April 1, 2004, the City population was 55,360, representing an increase of another 4,220 residents and an estimated 1,850 units. The number of units realized between 2002 and 2004 exceeds the forecast projection of 1,389 units by 461 units (153 units per year). Some of this development can be explained by new housing developed in areas annexing to the City. However, the increase exceeds the proportional share of housing target and forecast growth assigned to this annexation area and assumed by the City upon annexation.

For the purposes of the next phase of the planning cycle, the 2007 to 2012 six-year Capital Facilities Plan, Renton will continue plan for the next six-year increment of forecast growth assuming an increase of 2,778 units and 9,600 jobs. Forecast growth represents the upper end of expected growth, while the target of 846 units and 9,300 jobs represented the minimum amount of growth expected for this period. The City's population in the year 2012 is forecast as 61,694 persons.

To be sure, growth will not occur precisely as projected over the next six-year or the 21-year period. Recognizing this fact, the Capital Facilities Plan should be updated at least biennially. In this way local governments have the opportunity to re-evaluate their forecasts in light of the actual growth experienced, revise their forecasts for the next six years if necessary, and adjust the number and timing of capital facilities that would be needed during the ensuing six-year period. The City performed such a review of the Capital Facilities Plan in 2004 and determined that there was not a need to adjust the growth forecast or the number and timing of capital facilities. This conclusion was based on a finding that although actual growth was higher than forecast, the level of service standards were being maintained. Subsequent reviews may result in revisions to the growth projections and the number and timing of capital facilities if actual growth continues to exceed the forecast growth.

As stated in Policy CFP-1, this Capital Facilities Plan is anticipated to be updated regularly as part of the city's budget process, thereby ensuring that the Plan reflects the most current actual statistics related to growth in Renton, and that capital facilities are slated for implementation in accordance with both the level of service standards and the city's concurrency policy. It is anticipated that the City will fully implement this policy (CFP-1) in the annual budget process.

CAPITAL FACILITIES PLAN POLICIES

Policy CFP-1. The Capital Facilities Plan should be updated on a regular basis as part of the city's budget process, and such update may include adjustments to growth projections for the ensuing six years, to level of service standards, to the list of needed facilities, or to anticipated funding sources. For the purpose of capital facilities planning, plan for forecast growth at the high end of the projected range and targeted growth as a minimum.

Policy CFP-2. Level of service standards should be maintained at the current or at a greater level of service for existing facilities within the City of Renton, which the City has control over.

Policy CFP-3. Adequate public capital facilities should be in place concurrent with development. Concurrent with development shall mean the existence of adequate facilities, strategies, or services when development occurs or the existence of a financial commitment to provide adequate facilities, strategies, or services within six years of when development occurs.

Policy CFP-4. No deterioration of existing levels of service that the City of Renton has control over should occur due to growth, consistent with Policy CFP-3.

Policy CFP-5. Funding for new, improved, or expanded public facilities or services should come from a mix of sources in order to distribute the cost of such facilities or services according to use, need, and adopted goals and policies.

Policy CFP-6. Evaluate levying impact fees on development for municipal services and/or school district services upon the request of each school district within the City limits, if a compelling need is established through means such as presentation of an adopted Capital Facilities Plan and demonstration that such facilities are needed to accommodate projected growth and equitably distributed throughout the district.

Policy CFP-7. Adopt by reference the most current Kent School District # 415 Capital Facilities Plan and adopt an implementing ordinance establishing a school impact fee consistent with the District's adopted Capital Facilities Plan.

Policy CFP-8. Adopt by reference the most current Issaquah School District #411 Capital Facilities Plan and adopt an implementing ordinance establishing a school impact fee consistent with the District's adopted Capital Facilities Plan.

Policy CFP-9. Adopt by reference the most current Renton School District #403 Capital Facilities Plan and adopt an implementing ordinance establishing a school impact fee consistent with the District's adopted Capital Facilities Plan.

Policy CFP-10. Support private/public partnerships to plan and finance infrastructure development, public uses, structured parking and community amenities to stimulate additional private investment and produce a more urban environment.

(See the Public Facilities and Annexation Sections of the Land Use Element, the Parks, Recreation Trails and Open Space Element, the Utilities Element, and the Transportation Elements for policies related to this Capital Facilities Plan.)

TRANSPORTATION CAPITAL FACILITIES PLAN

2008-2013

Inventory of Existing Facilities

Figures 7-1, 7-2, and 7-3 on the following pages indicate the degree to which Renton's transportation system is integrally linked to the regional transportation system. The first exhibit is of the existing street and highway system; the second depicts traffic flows on that system in 2002; and, the third depicts daily traffic volumes forecasted for 2022. In Renton perhaps more than in any other jurisdiction in the Puget Sound area, actions relating to the transportation system have local and regional implications.

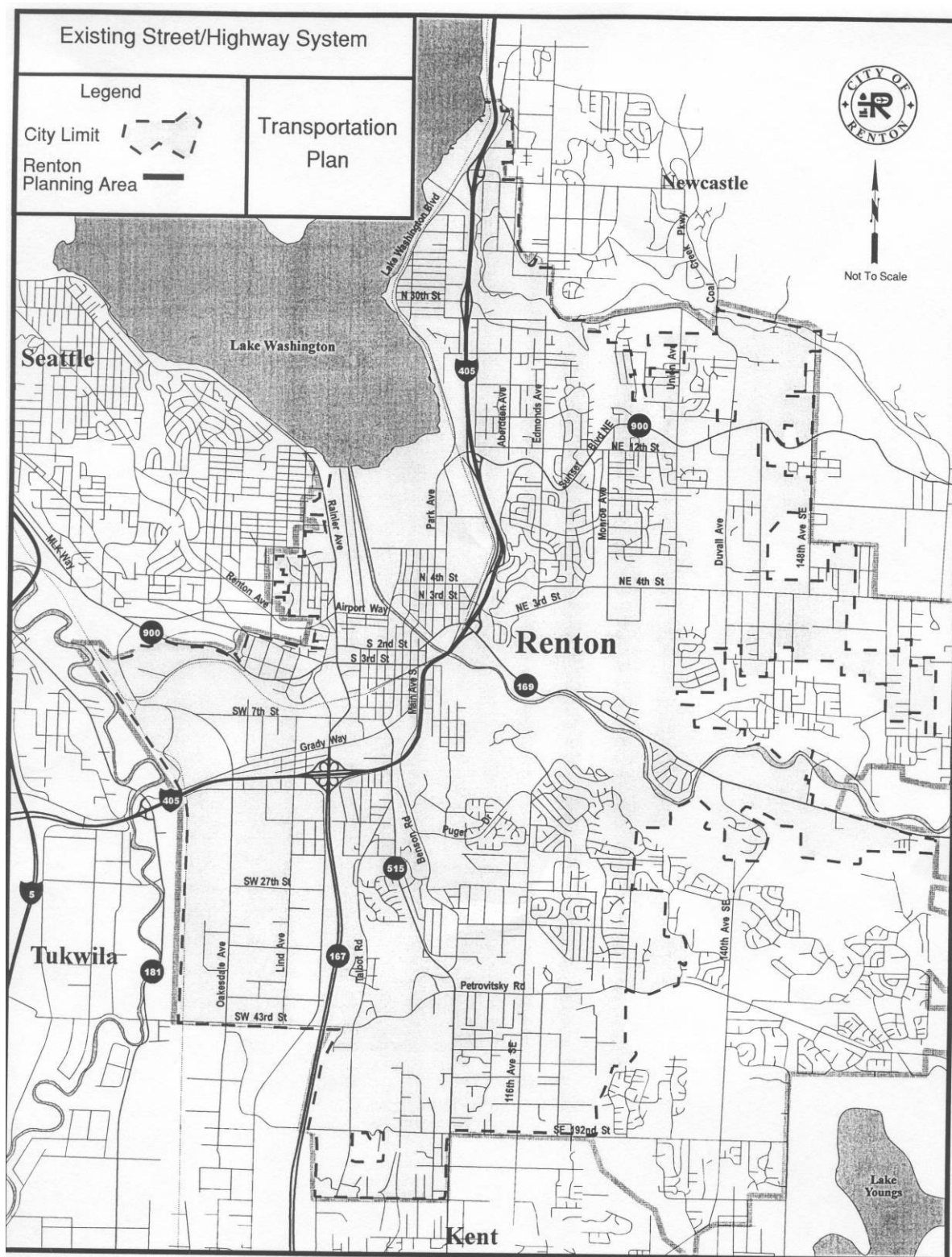
Level of Service

Background

In recognition of the regional nature of the traffic problems faced by Renton and the basic impossibility of building enough roadway capacity to alleviate traffic congestion, the City of Renton has adopted a LOS policy in that emphasizes the movement of people, not just vehicles. The LOS policy is based on three premises:

- Level of Service (LOS) in Renton is primarily controlled by regional travel demands that must be solved by regional policies and plans;
- It is neither economically nor environmentally sound to try to accommodate all desired single occupancy vehicle (SOV) travel; and
- The decision-makers for the region must provide alternatives to SOV travel.

Fig. 7-1
Existing Street/Highway System



**Figure 7-2
Traffic Flow Map**

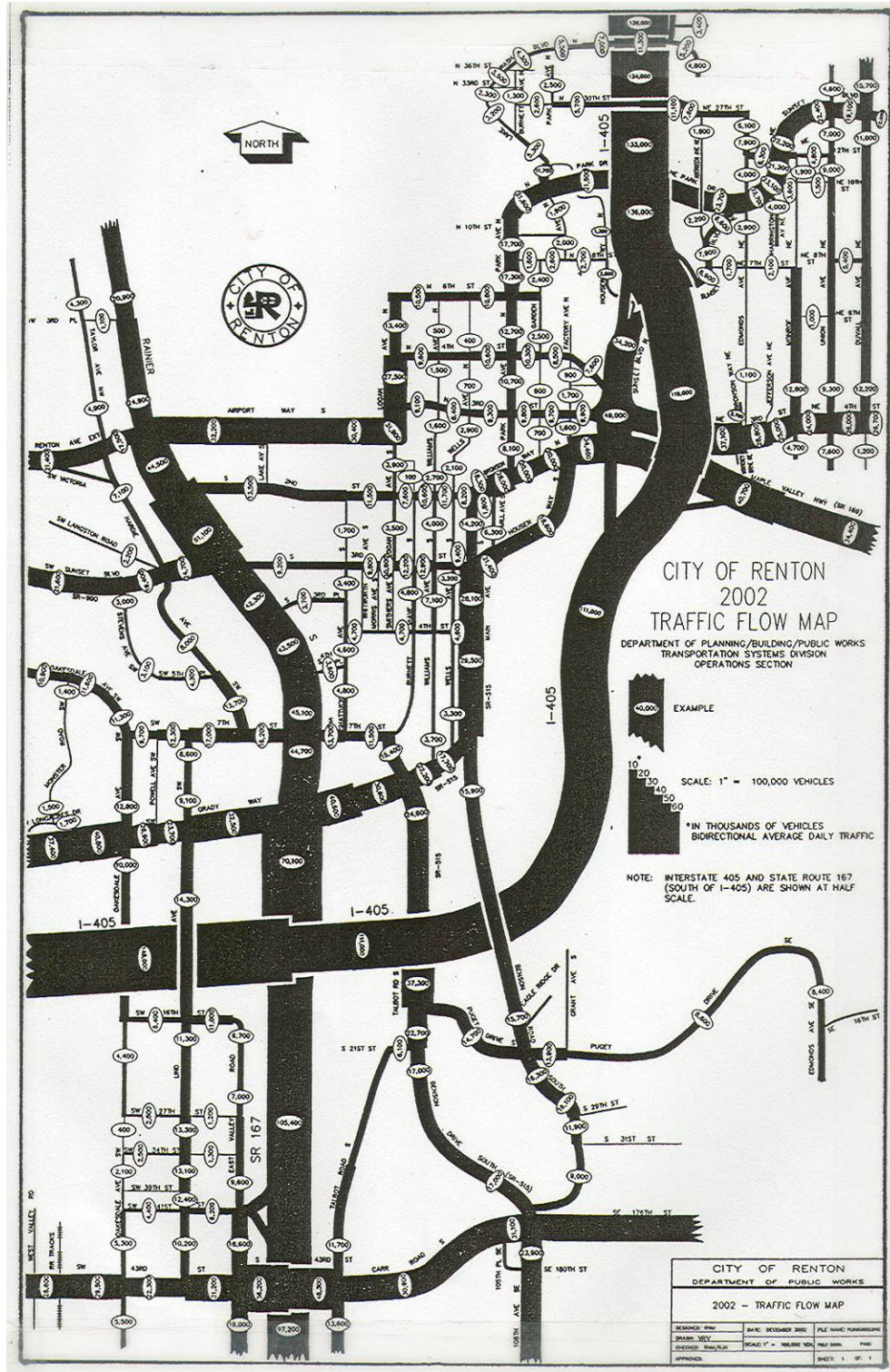
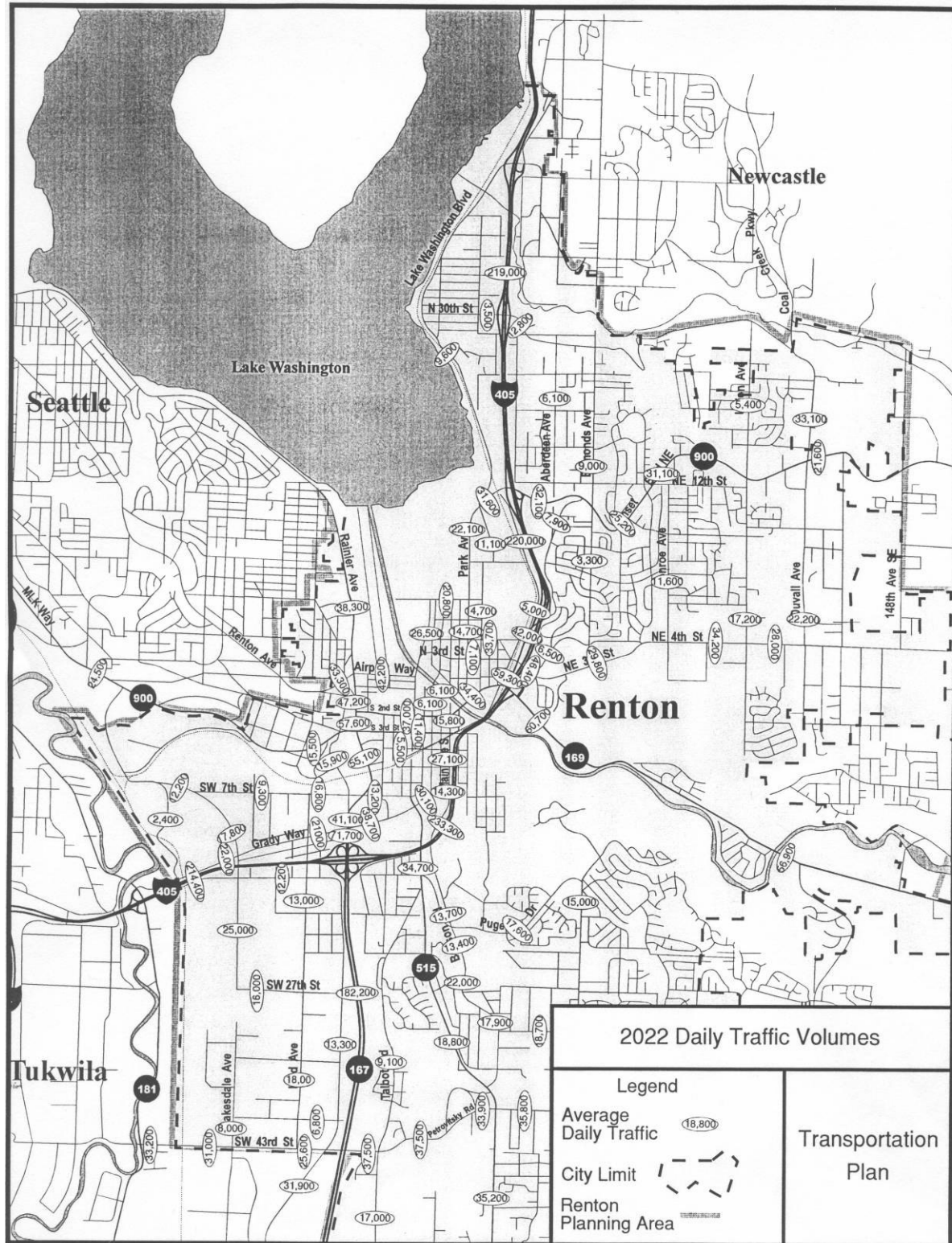


Fig. 7-3
2022 Daily Traffic Volumes



The LOS policy is based on travel time contours which in turn are based on auto, transit, HOV, non-motorized, and transportation demand management/commute trip reduction measures. The LOS policy is designed to achieve several objectives:

- Allow reasonable development to occur;
- Encourage a regionally linked, locally oriented, dynamic transportation system;
- Meet requirements of the Growth Management Act;
- Meet the requirements of the Countywide Planning Policies Level of Service Framework Policies;
- Require developers to pay a fair share of transportation costs; and
- Provide flexibility for Renton to adjust its LOS policy if the region decides to lower regional LOS standards by not providing regional facilities.

The City of Renton LOS standard is used to evaluate Renton citywide transportation plans. The auto, HOV, and transit measures are based on travel times and distance and are the primary indicators for concurrency. The non-motorized and TDM measures assist in meeting multi-modal goals of Renton and the region.

The Level of Service Standard Methodology

The following table demonstrates how the LOS policy is applied. A 2002 LOS travel time index has been calculated for the City by establishing the sum of the average 30-minute travel distance for SOV, HOV and Transit as follows:

Average PM peak travel distance in 30 minutes from the city in all directions			
SOV	HOV	2 Transit (includes access time)	LOS Standard
XX miles	XX miles	2 times X miles = XX	XX

Citywide Level of Service Standard (Years 2002 and 2022)

The 2002 LOS index is the basis for the 2022 standard. The average SOV 30-minute travel distance is forecast to decrease by 2022. Therefore, SOV improvements will need to be implemented to raise the SOV equivalent or a combination of HOV and/or transit improvements will need to be implemented to raise the HOV and/or transit equivalents to maintain the LOS standard.

Renton's Transportation Improvement Plan Arterial, HOV, and Transit Sub-Elements have been tested against the above LOS standard to assure that the Plan meets the year 2022 standard.

Citywide Level of Service Index (Year 2002):

Average PM peak travel distance in 30 minutes from the city in all directions			
SOV	HOV	2 Transit (includes access time)	LOS Index
16.6 miles	18.7 miles	6.8 miles	42*

*Rounded

NOTE: A LOS index of 42 has been determined for the year 2002 by the new calibrated (2002-2022) transportation model that reflects 2002 and 2022 land use data. The 2002 LOS index of 42 is shown above, and is the basis for the 2022 LOS standard.

City-wide Level of Service Standard (Year 2022):

Average PM peak travel distance in 30 minutes from the city in all directions			
SOV	HOV	2 Transit (includes access time)	LOS Standard
15 miles	17 miles	10 miles	42

The City of Renton LOS standard is used to evaluate citywide transportation plans. The auto, HOV, and transit measures are based on travel times and distance and are the primary indicators for concurrency. The non-motorized and TDM measures serve as credit toward meeting multi-modal goals of Renton and the region.

Needed Capital Facilities and Funding Plan, 2008-2013

The transportation 6-year facilities plan is based on achieving the desired level of service by the year 2022 through an annual program of consistent and necessary improvements and strategies. Additionally, the plan includes projects such as bridge inspections, street overlay programs, traffic signal maintenance, and safety improvements that are needed as part of the City's annual work program. Projects that promote economic development also are included, as encouraged by the GMA. See Figure 7-4 on the following page for the latest adopted 6-year plan.

The first step in developing the 6-year funding plan was to establish a 20-year plan that included arterial, HOV and transit components. This effort resulted in a planning level cost estimate of \$134 million. The cost for arterials and HOV are total costs (or Renton's share of the cost of joint projects with WSDOT and local jurisdictions). The transit costs include only the local match for local feeder system improvements, park and ride lots, signal priority and transit amenities.

Having established a 20-year funding level of \$134 million, an annual funding level of \$6.7 million was established. With this funding level, it is reasonably certain that the desired level of service will be maintained over the intervening years as long as the facilities funded each year are consistent with the 20-year plan and transit and HOV facilities are conscientiously emphasized.

The funding source projections in Figure 7.5 are based upon the assumption that: gas tax revenue would continue at no less than \$0.35 million per year; that grant funding would be

maintained at \$3.90 million per year; business license fees would continue at \$1.88 million per year based on the current 85% of the annual revenue generated from this fee that is dedicated to fund transportation improvements; and that \$0.57 million per year from mitigation fees would be maintained. Based on forecasts of total new vehicle trips from development, a mitigation fee of \$75 per trip has been established.

Developers are required to implement site-specific improvements to ensure that on-site and adjacent facility impacts are mitigated, as well as paying their required fees.

Fig. 7-4
2008-2013 Six-Year TIP
Total Project Costs

CITY OF RENTON PLANNING / BUILDING / PUBLIC WORKS TRANSPORTATION SYSTEMS DIVISION 2008-2013 SIX-YEAR TIP

Total Project Costs										
TIP	Project Title	Previous Costs	2008	2009	2010	2011	2012	2013	Six-Year Period Total	Total Cost
1	Street Overlay	1,240,604	685,000	685,000	685,000	685,000	685,000	685,000	4,110,000	5,350,604
2	Arterial Rehab Program	435,000	470,000	310,000	264,000	636,000	220,000	220,000	2,120,000	2,555,000
3	Duvall Ave NE	4,687,369	2,149,240	1,432,826					3,582,066	8,269,435
4	Duvall Ave NE - King County	2,564,104	3,533,475						3,533,475	6,097,579
5	Duvall Ave NE - NE 7th St to Sunset E				5,000	515,000	2,750,000	1,980,000	5,250,000	5,250,000
6	SR 169 HOV - 140th to SR900	6,380,481	1,544,500			2,550,000			4,094,500	10,474,981
7	Rainier Ave - Grady Way to S 2nd St	7,996,391	10,200,000	6,800,000	3,700,000	1,300,000			22,000,000	29,996,391
8	SW 27th St/Strander Bv Connect.	9,326,048	8,426,000	8,210,000	1,096,600	1,626,900	5,082,300	20,960,800	45,402,600	54,728,648
9	NE 4th St/Hoquiam Av NE	366,544	33,456						33,456	400,000
10	Ripley Lane	200,000	447,000						447,000	647,000
11	Garden Ave N Widening	500,000	500,000	500,000					1,000,000	1,500,000
12	May Creek Bridge Replacement	185,809	20,000	550,000	160,000	5,000			735,000	920,809
13	Monterrey / NE 20th St Wall Rep					30,000			30,000	30,000
14	Bridge Inspection & Repair	138,273	100,000	330,000	50,000	55,000	50,000	50,000	635,000	773,273
15	Intersection Safety & Mobility	250,000	400,000	250,000	250,000	250,000	250,000	250,000	1,650,000	1,900,000
16	Traffic Safety Program	131,663	20,000	20,000	40,000	40,000	40,000	40,000	200,000	331,663
17	School Zone Sign Upgrades	200,103	100,000						100,000	300,103
18	RR Crossing Safety Prog.	5,499	5,000	5,000				10,000	20,000	25,499
19	Loop Replacement Program	30,000	20,000	25,000	30,000	30,000	30,000	30,000	165,000	195,000
20	Sign Replacement Program	9,953	5,000	5,000	7,500	7,500	7,500	7,500	40,000	49,953
21	Pole Program	39,626	20,000	20,000	25,000	25,000	25,000	25,000	140,000	179,626
22	Traffic Efficiency Program	156,113	50,000	50,000	50,000	30,000	30,000	30,000	240,000	396,113
23	Transit Program	53,346	75,000	75,000	74,000	74,000	74,000	70,000	442,000	495,346
24	TDM Program	105,207	65,000	65,000	65,000	65,000	65,000	65,000	390,000	495,207
25	Bicycle Route Dev Program	139,753	18,000	18,000	110,000	80,000	80,000	80,000	386,000	525,753
26	Walkway Program	920,372	250,000	250,000	250,000	250,000	380,000	380,000	1,760,000	2,680,372
27	Missing Links Program	59,190	30,000	30,000	30,000	30,000	30,000	30,000	180,000	239,190
28	Barrier Free Transition Plan Implemen		50,000	50,000	50,000	50,000	50,000	50,000	300,000	300,000
29	South Renton Project	406,250	2,000						2,000	408,250
30	Project Development/Pre-design	282,729	148,000	200,000	200,000	200,000	200,000	200,000	1,148,000	1,430,729
31	Arterial Circulation Program	287,806	200,000	250,000	250,000	250,000	250,000	250,000	1,450,000	1,737,806
32	Trans Concurrency	60,000	40,000	10,000	10,000	40,000	10,000	30,000	140,000	200,000
33	Environmental Monitoring	149,969	50,000	30,000	30,000	30,000	30,000	30,000	200,000	349,969
34	WSDOT Coordination Program	19,710	65,000	65,000	60,000	60,000	40,000	40,000	330,000	349,710
35	GIS Needs Assessment	40,931	20,000	20,000	20,000	150,000	150,000	150,000	510,000	550,931
36	1% for the Arts	77,505	30,000	30,000	50,000	30,000	30,000	30,000	200,000	277,505
37	Houser Wy S - Main to Burnett			350,000	350,000	350,000			1,050,000	1,050,000
38	NE 3rd/NE 4th Corridor	223,127	2,000	320,000	4,050,000	1,770,000	1,640,000	1,640,000	9,422,000	9,645,127
39	Lake Wash, Bv-Park to Coulon Pk	325,413			82,413	138,325			220,738	546,151
40	Lind Av - SW 16th-SW 43rd	5,000	5,000	5,000		1,914,000	626,000		2,550,000	2,555,000
41	Logan Av Concrete Panel Repair				460,000				460,000	460,000
42	Sam Chastain Lake WA Trail Connect		50,000	650,000	4,300,000				5,000,000	5,000,000
	Total Sources	37,999,888	29,828,671	21,610,826	16,804,513	13,266,725	12,824,800	27,333,300	121,668,835	159,668,723

Total Project Costs

08/2/2007

Fig. 7-5
-2008-2013 Six-Year TIP
Summary of Funding Sources

2008 - 2013 SIX-YEAR TIP

SUMMARY OF FUNDING SOURCES

ITEM		Period Total	Period					
			2008	2009	2010	2011	2012	2013
SIX-YEAR PROJECT COSTS:								
	Project Development	3,889,200	539,300	642,300	667,700	711,300	656,300	672,300
	Precon Eng/Admin	7,953,800	2,369,500	269,500	1,712,600	2,848,900	544,300	209,000
	R-O-W (includes Admin)	8,785,000	7,600,000	200,000	250,000	250,000	267,000	218,000
	Construction Contract	88,685,813	15,930,500	18,034,500	12,713,913	8,454,500	10,053,500	23,498,900
	Construction Eng/Admin	10,612,322	2,634,671	2,254,826	1,229,600	814,825	1,123,500	2,554,900
	Other	1,742,700	754,700	209,700	230,700	187,200	180,200	180,200
	Sub - TOTAL SIX-YEAR COST	121,668,835	29,828,671	21,610,826	16,804,513	13,266,725	12,824,800	27,333,300
SOURCE OF FUNDS:								
	Vehicle Fuel Tax ¹	3,650,000	585,000	595,000	610,000	615,000	620,000	625,000
	Business License Fee ¹	11,400,000	1,800,000	1,800,000	1,800,000	2,000,000	2,000,000	2,000,000
	Proposed Fund Balance	2,695,325	2,693,347	1,978				
	Grants In-Hand	16,771,246	6,365,471	7,634,450	1,940,000	831,325		
	Mitigation In-Hand ¹	5,176,049	1,873,229	2,121,720	974,000	207,100		
	Bonds/Vehicle License Fee	2,500,000		500,000	500,000	500,000	500,000	500,000
	Other In-Hand	22,270,181	14,510,675	3,755,956	2,174,550	43,000	743,000	1,043,000
	Sub - TOTAL SIX-YEAR FUNDED	64,462,801	27,827,722	16,409,104	7,998,550	4,196,425	3,863,000	4,168,000
	Grants Proposed	9,779,000	400,000	2,084,000	1,160,000	1,435,000	2,700,000	2,000,000
	Mitigation Proposed							
	L.I.D.'s Proposed							
	Other Proposed	6,855,949	1,600,949	2,035,000	1,635,000	135,000	750,000	700,000
	Undetermined	40,571,085		1,082,722	6,010,963	7,500,300	5,511,800	20,465,300
	Sub - TOTAL SIX-YEAR UNFUNDED	57,206,034	2,000,949	5,201,722	8,805,963	9,070,300	8,961,800	23,165,300
	TOTAL SOURCES - FUNDED & UNFUNDED	121,668,835	29,828,671	21,610,826	16,804,513	13,266,725	12,824,800	27,333,300

Summ. of Source

08/21/2007

12.52

¹ Some funds are estimated earlier than expected.

WATER CAPITAL FACILITIES PLAN

2007- 2012

Inventory of Existing Facilities

Renton's water system provides service to an area of approximately 16 square miles and more than 14,700 customers located in 12 hydraulically-distinct pressure zones. An inventory of the existing capital facilities in the water system is listed in Figure 8-1 and consists of 8 wells and one spring for water supply, eleven booster pump stations, eight reservoirs, water treatment facilities at each source (chlorine and fluoride and corrosion control) and approximately 283 miles of water main in service. In addition, the City maintains one standby well and seven metered connections with the City of Seattle (Cedar River and Bow Lake supply pipelines) for emergency back-up supply. Renton supplies water on a wholesale basis to Lakeridge Bryn-Mawr Water District.

Level of Service

Level of service for Renton's Water Utility is defined by the ability to provide an adequate amount of high quality water to all parts of the distribution system at adequate pressure during peak demand or fire. This ability is determined by the physical condition of the system and the capacity of supply, storage, treatment, pumping and distribution systems. Level of service standards for the water system vary according to the component of the overall system and are determined by the requirements established by local, state, and federal regulations. Water supply is regulated by the Washington State Department of Ecology (water rights), and the Washington State Department of Health (quantity guidelines), water quality is regulated by the U.S. Environmental Protection Agency (Safe Drinking Water Act) and the Washington State Department of Health (primacy over Safe Drinking Water Act), system design and construction requirements are regulated by the Washington State Department of Health.

The Water Utility maintains a hydraulic model of the water system. The model incorporates the pipe size and location, booster pumps, and storage to determine the flow and pressure available in each segment of the distribution system. The Utility can evaluate the impact of a specific development on the system using the model. The Water Utility reviews each development in terms of flow, pressure, and water supply required.

The Water Utility's goal is to provide an adequate supply of potable water under the "worst case" scenario. This scenario considers the following conditions: failure of the largest source of supply, failure of the largest mechanical component, power failure to a single power grid, and/or a reservoir out of service. Under this scenario, the Water Utility strives to meet the following primary requirements:

Pressure: Maintain a minimum of 30 pounds per square inch (psi) at the meter during normal demand conditions and a minimum of 20 psi during an emergency. Maximum allowable pressure at the meter during normal demand is 130 psi and a maximum of 150 psi during an emergency

Velocity: Under normal demand conditions, the velocity in a transmission main is less than 4 feet per second (fps) and less than 8 fps during an emergency.

Supply: The water supply must meet the maximum day demand and replenish storage within 72 hours with the largest source of supply out of service.

Storage: Storage volume must be maintained to provide for peak demand and adequate volume for an emergency (fire).

Transmission and Distribution: The Water Utility uses design criteria approved by the Washington State Department of Health.

Treatment and Monitoring: The Water Utility treats all sources with chlorine and fluoride and corrosion control. Water quality monitoring is conducted as required by the State Department of Health under the Safe Drinking Water Act. The City implements a cross connection control program to prevent cross connections with non potable sources and a wellhead protection program.

Fire Flow: Fire flow required by a development is as established in the fire code and can vary from 1000 gallons per minute to 5500 gallons per minute.

Needed Capital Facilities and Funding Plan, 2007- 2012

Based on the projected growth in population and employment by the year 2012, the existing supply of water will meet the level of service standard. As Fig. 8-1 indicates, with the addition of Wells 11, 12 and 17, the net capacity of the system is 27.07 million gallons per day, which is adequate to meet the City's anticipated growth and maximum day demand for water to at least 2020. Meeting the current fire flow level of service standards will require improvements to the existing water system if the projected commercial and industrial growth occurs. In general, fire flow is adequate to all single family and multi-family areas with the possible exception of portions of downtown, depending on the extent of new multi-family development and the type of construction. Certain areas slated for commercial and industrial growth will need upgrading of the system.

Other improvements to the water system will be needed during the first six years of the Comprehensive Plan because of regulatory requirements relating to water quality and efforts to maintain the existing system at the desired level of service.

The list of growth-related facilities needed to meet all of the level of service standards and regulatory requirements are in Fig. 8-2.

The funds for the needed facilities are projected to come from a number of sources, including: water utility rates, connection fees, developer extension agreements, low interest loans from state or federal programs, and grants from state and federal agencies. The projected total revenue from all sources for each of the six years is also shown in Fig. 8-2.

Fig. 8-1
On-Line Supply Sources – Existing Water Supply Capacity

Name	Pumping Rate (gpm)	Pumping Rate (mgd)
Springbrook	600	0.86
Well RW-1	2,200	3.17
Well RW-2	2,200	3.17
Well RW-3	2,200	3.17
Well RW-5A	1,400	2.02
Well PW-8	3,500	5.04
Well PW-9	1,200	1.73
Well PW-11	2,500	3.60
Well PW-12	1,500	2.16
Well PW-17	1,500	2.16
TOTAL	18,800 GPM	27.07 MGD

GPM: gallon per minute

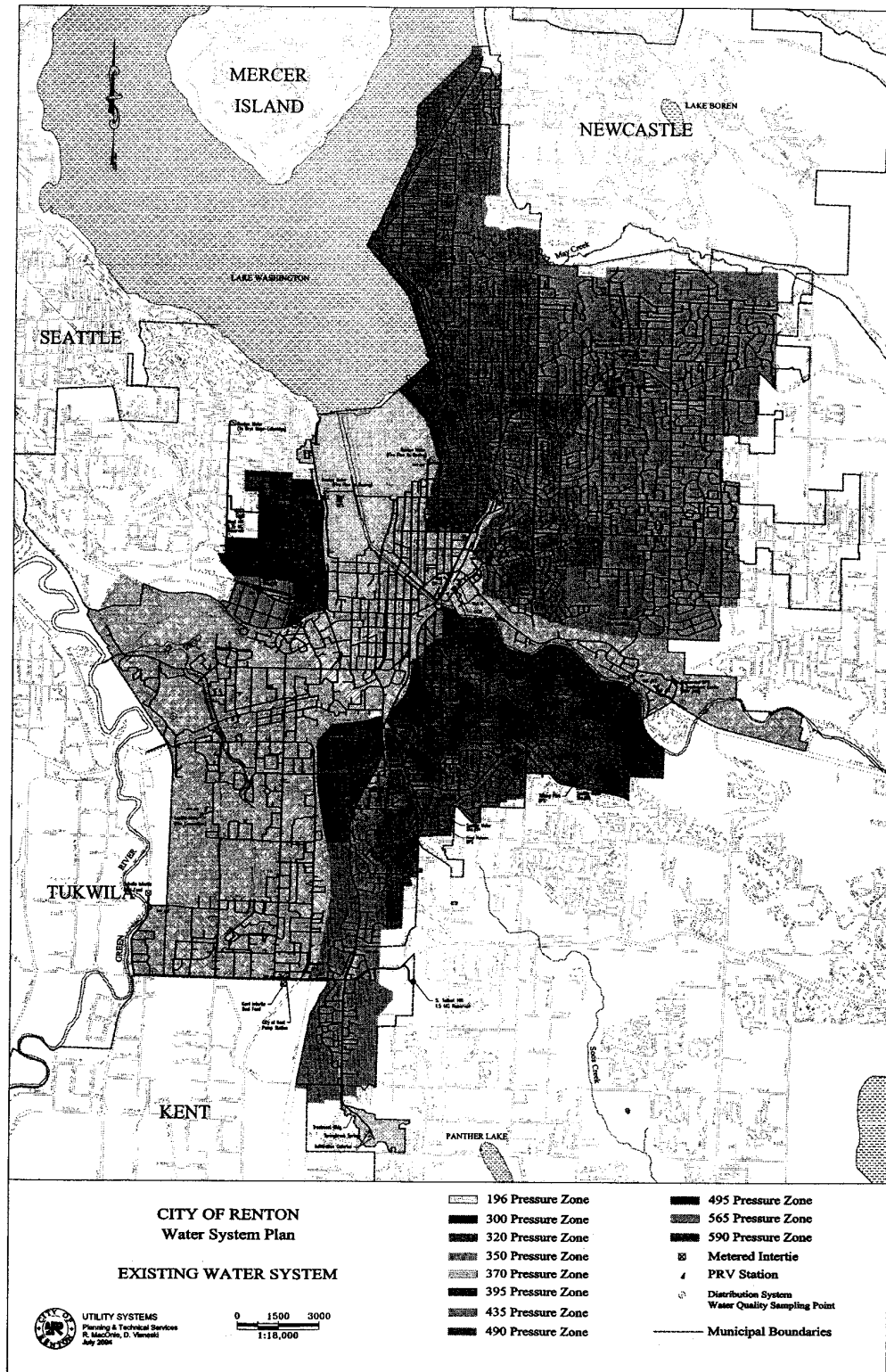
MGD: million gallon per day

Total annual water rights are 14,809 acre-feet per year

Fig. 8-2
Water Capital Facilities
Summary of Water Utilities Capital Improvement Projects
2007- 2012

Table 8-2							
Items for Development-Water	2007	2008	2009	2010	2011	2012	Total
New Reservoirs and Pump Stations	\$3,380,000	\$500,000	\$500,000	\$2,000,000	\$1,000,000	\$1,000,000	\$8,380,000
Supply Development and Water Quality Improvements	\$810,000	\$3,450,000	\$40,000	\$100,000	\$100,000	\$100,000	\$4,600,000
Total	\$4,190,000	\$3,950,000	\$540,000	\$2,100,000	\$1,100,000	\$1,100,000	\$12,980,000
Funding Sources- Water	2007	2008	2009	2010	2011	2012	Total
Operating	\$2,458,000	\$ 1,641,000	\$ 644,000	\$ 1,260,000	\$ 980,000	\$ 1,022,000	\$ 8,005,000
Bonds/Loans	\$3,688,000	\$ 2,461,000	\$ 966,000	\$ 1,890,000	\$ 1,470,000	\$ 1,533,000	\$ 12,008,000
SDC/SAD	\$2,634,000	\$ 1,758,000	\$ 690,000	\$ 1,350,000	\$ 1,050,000	\$ 1,095,000	\$ 8,577,000
Total	\$8,780,000	\$ 5,860,000	\$ 2,300,000	\$ 4,500,000	\$ 3,500,000	\$ 3,650,000	\$ 28,590,000

Figure 8-3
Existing Water System



WASTEWATER CAPITAL FACILITIES PLAN

2007-2012

Inventory of Existing Facilities

Renton's sanitary sewer system consists of about 205 miles of gravity sewers, 26 lift stations with associated force mains, and approximately 3,800 manholes. Wastewater is discharged to regional facilities at over 75 locations within the service area. The locations of Renton's sewer interceptors and lift stations, as well as Metro's sewer lines, are shown in Figure 9-2.

The City's Wastewater Utility serves approximately 15,700 customers, which includes approximately ninety-five percent of the city's population and eighty-five percent of the city's land area. The remaining five percent of the population currently utilizes private, on-site wastewater disposal systems, typically septic system, while the balance of the land area either utilizes private systems or remains undeveloped.

The capacity of the existing facilities is adequate to handle the current demand. The Lake Washington East Basin while currently having sufficient capacity, needs some improvements to portions of the Sunset Interceptor to assure sufficient capacity to accommodate anticipated growth. The West Renton Sub-basin also needs to be further evaluated to determine potential capacity restraints. A full hydraulic model has been developed to evaluate, system wide, the long term need and timing for upsizing of existing interceptors and the timing for additional interceptors for new portions of our service area. The conclusions of this analysis are included in a Final Report dated July 2006. Results from this report will be incorporated into the 2008-2013 CIP and the 2007/08 update to the Wastewater Long Range Management Plan.

Level of Service

Level of service for Renton's Wastewater Utility is defined by the ability to move sewage from the point of origin, the customer, to the treating agency, King County, in a safe and efficient manner. This ability is determined by the physical condition of Renton's system and the capacity available in the system. It is the Renton Wastewater Utility's responsibility to maintain the system in a safe condition and monitor the standards for new construction. The Wastewater Utility is also responsible for ensuring that capacity exists in the system prior to new connections or that the capacity is created as part of the new development.

The level of service for Renton's Wastewater Utility is developed through coordination with and subject to the policies, design criteria, and standards used for planning and operating a sanitary sewer system as established by the laws and policies of several agencies. Those agencies, in order by authority, are the Department of Ecology (Criteria for Sewage Works Design), King County (King County Wastewater Treatment Division), and the City of Renton.

As stated above, the Utility has developed a new hydraulic model that allows the Utility to perform dynamic analysis on any portion of its interceptor system given any scenario, to determine capacity within the system. The model is also based upon two years worth of wet-weather flow data that was developed as part of a regional effort by King County. This new tool gives us much greater ability to predict future capacity within our interceptors.

The Wastewater Utility's goal is to have sufficient capacity to handle what the Utility considers the 'worst case scenario'. That is, the amount of waste if everybody was discharging their highest amount at the same time and the system was experiencing the highest amount of inflow and infiltration anticipated.

For existing and projected development Renton uses the following criteria for flow projection:

Average Single Family Domestic Flow	270 gallons per day per unit
Average Multi-Family Domestic Flow	190 gallons per day per unit
Light Industrial	2800 gallons per acre per day
Heavy Industrial	site specific
Commercial	2800 gallons per acre per day
Office	2800 gallons per acre per day
Recreation	300 gallons per acre per day
Public	600 gallons per acre per day
Manufacturing Park	2800 gallons per acre per day
Peak Infiltration/Inflow (New System)	1500 gallons per acre per day
Peak Inflow/Infiltration (Existing System)	From Sewer Hydraulic Model
Peaking factor for system average	2.0 X
Depth to Diameter Ratio	0.80 (eight tenths)

The criteria listed above are based upon Table IV-3 of the 1998 Long Range Wastewater Management Plan, with an amendment for actual Inflow and Infiltration values based upon updated criteria from King County. This criteria is subject to change based upon the latest adopted Long Range Wastewater Management Plan or amendments thereto. These flows are averages used as standards. Actual design flows may vary considerably, depending upon land use. The Wastewater Utility will consider verifiable alternate design flows that may be submitted.

If Renton's sewer system has the capacity to handle the flows projected, based upon the above criteria, or a developer improves the system to provide the capacity, the project achieves concurrence with the Wastewater Utility's level of service.

Needed Capital Facilities and Funding Plan, 2007- 2012

Based on the forecasted growth in population and employment over the next 20 years, daily wastewater flows are predicted to increase by about 15.3 million gallons per day (mgd.) This increase is expected to impact the entire system, with the greatest impact expected to occur in the East Cedar River Basin and Lake Washington East Basin. In order to maintain the desired level of service and accommodate the projected growth, facility improvements are scheduled in both the East Cedar River Basin and the Lake Washington East Basin over the next two years.

Another factor affecting level of service is the age of the existing system. A significant portion of the city's wastewater collection and conveyance system is over fifty years old. Some of these mains cannot be relied upon to provide the desired level of service without major repair and/or replacement. Consequently, the primary component of the six-year facility plan is the repair and replacement of the existing system in order to maintain the current level of service. Some of the geographic areas in which these mains are located will experience more growth than will others, but facility improvements will be needed regardless.

It is currently the policy of the Wastewater Utilities that all parcels connecting to the sewer system pay for their fair share of the system. This is accomplished in a combination of three methods:

1. Local Improvement Districts may be formed with the city installing the sewers using LID bonds encumbering the participating parcels;
2. The Wastewater Utility may front the cost of new sewers and hold Special Assessment Districts against benefiting parcels; and
3. Developers or potential users will front the cost of extending the main with the ability to hold a latecomer agreement against the other parcels that potentially benefit.

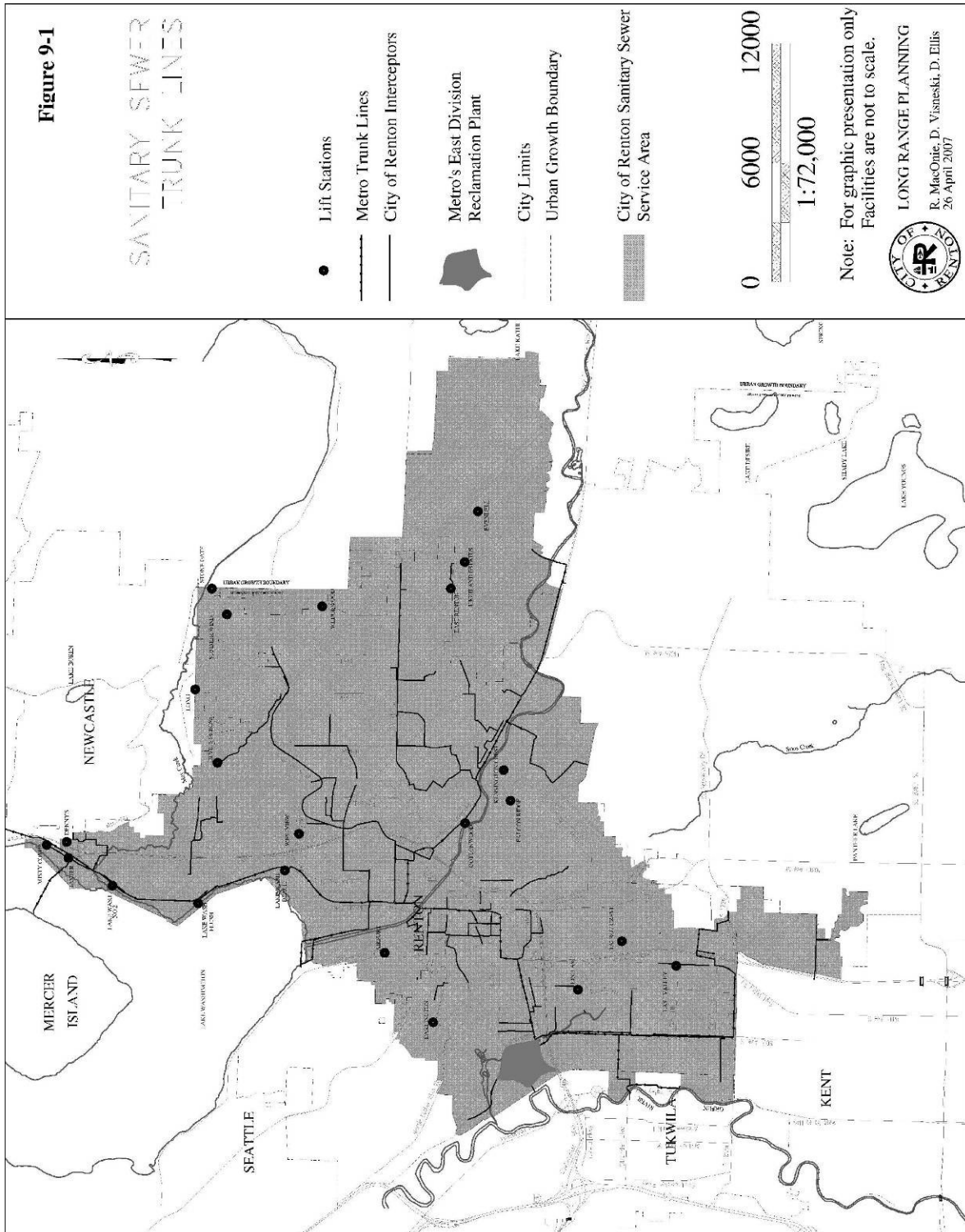
Projects that replace and rehabilitate the existing system, as well as operation and maintenance costs, will be funded through rates paid by existing customers. Existing sewer customers will not be required to participate in Special Assessment District fees, latecomer fees, or local improvement districts unless they redevelop or increase the density on their property.

Table 9-1 lists the projects needed to meet growth, along with the sources of funds for them for the period 2005-2010, based upon the six-year growth projections and the desired level of wastewater service.

Figure 9-1
Wastewater Capital Facilities
2007- 2012

Table 9-1							
Items for Development-Wastewater	2007	2008	2009	2010	2011	2012	Total
Sanitary Sewer Main Extensions	\$900,000						\$900,000
Lift Station Replacement/Rehabilitation		\$2,200,000					\$2,200,000
Funding Sources- Wastewater	2007	2008	2009	2010	2011	2012	Total
Operating	\$ 735,000	\$ 735,000	\$ 735,000	\$ 735,000	\$ 735,000	\$ 735,000	\$ 4,410,000
Bonds/Loans	\$1,103,000	\$ 1,103,000	\$ 1,103,000	\$ 1,103,000	\$ 1,103,000	\$ 1,103,000	\$ 6,615,000
SDC/SAD	\$ 788,000	\$ 788,000	\$ 788,000	\$ 788,000	\$ 788,000	\$ 788,000	\$ 4,725,000
Total	\$2,625,000	\$ 2,625,000	\$ 2,625,000	\$ 2,625,000	\$2,625,000	\$ 2,625,000	\$ 15,750,000

**Fig. 9-2
Sanitary Sewer Trunk Lines**



SURFACE WATER UTILITY CAPITAL FACILITIES PLAN

2007- 2012 Inventory of Existing Facilities

The City of Renton is composed of various drainage basins and sub-basins. The major basins within the existing City limits include the East Lake Washington, West Lake Washington, May Creek, Lower Cedar River and Black River basins. The City of Renton is located at the outlet end of a majority of these basins that discharge into either the Green/Duwamish River or into Lake Washington.

The Surface Water Utility's service area within the existing City corporate boundaries is approximately 17.2 square miles. The existing surface water system includes rivers, streams, ditches, swales, lakes, wetlands, detention facilities (pond and piped systems), water quality swales, wetponds, wetvaults, oil/water separators, coalescing plate oil/water separators, pipes, catch basins, manholes, outfalls and pump stations. The natural surface water systems (rivers, streams, lakes and wetlands) are shown on Renton's Critical Area Maps.

A majority of the water quantity and quality facilities are privately owned and maintained on-site as required in accordance with the Renton Storm and Surface Water Drainage Ordinance (RMC Chapter 22, Section 4-22).

The Surface Water Utility owns, maintains, and operates all storm and surface water management facilities located within public right-of-ways and easements dedicated for storm and surface water management purposes. The Utility currently owns, operates, and maintains approximately 204 miles of storm pipe systems including an estimated 8000 catch basin and manhole structures, 26 detention facilities and 37.67 miles of ditch systems. A combination of the public and some of the private storm system is shown in the Surface Water Utility Storm System Inventory Maps and Attributes data base which is too large to present here.

Level of Service

Background

The Surface Water Utility's policies, design criteria, and standards used for planning, engineering, operating, and maintaining the storm and surface water systems are based upon requirements that originate from many sources. Together, these regulations define the acceptable level of service for surface water.

The intended level of service is to accomplish the following:

- Provide adequate of surface water management for the appropriate rainfall duration and intensity to protect public safety, property and convenience of areas within City;
- Provide a level of storm water treatment that adequately protects surface and groundwater quality and other beneficial uses of water bodies;
- Provide flow control from new construction that restricts the rate of storm water runoff to pre-developed level; and
- Provide protection of fish and wildlife habitat.

The primary Federal, State and local agencies and regulations which affect the City of Renton's level of service standard for surface and storm water systems are listed below:

1. Federal Agencies/Regulations/Policies:
 - a. Environmental Protection Agency (EPA):
 - i. Federal Clean Water Act
 - ii. National Pollutant Discharge Elimination System (NPDES) permit)
 - b. Army Corps of Engineers (ACOE)
 - i. Nationwide/404 Individual Permit Requirements
 - ii. Federal Emergency Management Act standards

2. State Agencies/Regulations:
 - a. Washington State Department of Ecology (WSDOE):
 - i. NPDES Phase 2 Municipal Storm Water Permit
 - ii. NPDES Construction Storm Water Permit
 - iii. 401 Water Quality Certification Permits
 - iv. Coastal Zone Management Consistency Permit
 - v. Shoreline Management Program (SMP)
 - vi. The Puget Sound Water Quality Management Plan
 - vii. 2005 Ecology Stormwater Management Manual for Western Washington
 - b. Washington State Department of Fisheries and Wildlife (WDFW)
 - i. Hydraulic Project Approval Permits
3. Local Agencies/Regulations/Policies:
 - a. Cedar River Basin Plan
 - b. May Creek Basin Plan
 - c. Green River Basin Plan
 - d. Green River Flood Control Zone District/Green River Basin Program
 - e. King County Flood Hazard Management Plan
 - e. King County Surface Water Design Manual as adapted by Renton

Level of Service Standard in Renton

The Surface Water Utility level of service is the adopted surface water design standards which are consistent with the above referenced federal, state, and local regulations as specified in the City of Renton Storm and Surface Water Drainage ordinance (RMC 4-22). New surface water management systems are designed to accommodate the future land use condition runoff based upon the city's Land Use Element and the future land use plans of neighboring jurisdictions.

The standards specified in the city-adopted portions of the 1990 King County Surface Water Design Manual require that:

1. Post-development peak rate of runoff be controlled to the pre-developed peak rate of runoff up to the 10-year design storm;
2. Water quality facility "Best Management Practices" (BMP's) such as biofiltration, wetponds, wetvaults, coalescing plate oil/water separators, and erosion control measures are used;
3. Pipe systems be designed to convey the 25-year post-developed design storm without overflowing the system and pipe conveyance systems have adequate capacity to convey the 100-year design storm provided that the runoff is contained within defined conveyance system elements without inundating or over topping the crown of a roadway; and/or no portions of a building will be flooded; and/or if overland sheet flow occurs, it will flow through a drainage easement.

4. New drainage ditches or channels be designed to convey at least the peak runoff from the 100-year design storm without over-topping.

As a condition of SEPA, the City requires projects in areas of the City that drain to streams that flow down steep ravines to comply with the 2005 King County Surface Water Design Manual requirement and to meet the Level 2 Flow Control and Duration standard. Projects have also been required to comply with the surface water design standards in the 2005 Ecology Stormwater Management Manual for Western Washington when deemed appropriate by the City as a condition of SEPA, or because it was required as a condition of another agencies permit. The City is required to adopt new storm and surface water design standards that are equivalent to the standards in the 2005 Ecology Stormwater Management Manual for Western Washington by no later than August 2009. The adoption of the new storm water design standards is a requirement of the national Pollutant discharge Elimination System (NPDES) Phase 2 Municipal Separate Storm Sewer System storm water permit. The NPDES Phase 2 Municipal storm water permit was issued by Ecology in January 2007 to regulate the discharge of runoff into waters of the United States in accordance with the Federal Clean Water Act.

Projects that comply with the above-cited standards will achieve an acceptable level of service for surface water management purposes within the City of Renton.

Needed Capital Facilities and Funding Plan, 2007- 2012

The capital facilities estimated to be needed to solve current surface water management problems and to prevent future surface water management problems associated with the growth projected for the first six years of the Comprehensive Plan and the proposed sources of funding are listed in Figure 10-1.

The sources of revenues to be utilized by the Surface Water Utility to implement the needed capital improvements include the following:

1. Surface Water Utility rates;
2. Permit fees and system development charges;
3. Revenue bonds;
4. Private latecomers agreements;
5. Surface Water Utility Special Assessment Districts;
6. Low interest loans (state revolving funds, Public Works Trust Fund);
7. Cost-sharing interlocal agreements with adjacent jurisdictions and special districts;
8. Army Corps of Engineers - Section 205 Small Flood Control Projects Program and other financial assistance programs available to municipalities authorized by Congress;
9. USDA Soil Conservation Service (SCS) Watershed Flood Prevention and Protection Act (Public Law 566) and other SCS programs;

10. Grants from state and federal agencies such as:
 - a. Washington State Department of Ecology Centennial Clean Water Fund;
 - b. Washington State Department of Community Development Flood Control Assistance Account Program;
 - c. Washington State Salmon Recovery Funding Board and other grants that may be available from the County, State or Federal Government to improve fish habitat;
 - d. Washington State legislative appropriations approved for Special Surface Water Utility projects (Cedar River Delta project); and
11. Other unidentified federal, state, and local grant programs.

As is evident in Figure 10-1 on the following page, the Surface Water Utility proposed to use all or any combination of the financial sources to fund the needed capital facilities.

Fig. 10-1
Surface Water Utility Capital Facilities
2007- 2012

Table 10-1							
Items for Development- Surface Water							
Springbrook Creek Wetland and Habitat Mitigation Bank	2007	2008	2009	2010	2011	2012	Total
	\$150,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$650,000
Storm System Improvement and Replacement	\$125,000	\$1,200,000	\$1,400,000	\$1,150,000	\$950,000	\$850,000	\$5,675,000
Springbrook Creek Improvements	\$1,300,000				\$100,000	\$200,000	\$1,600,000
Cedar River Basin				\$150,000	\$700,000		\$850,000
Green River Ecosystem Restoration	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$60,000
Total	\$1,585,000	\$1,310,000	\$1,510,000	\$1,410,000	\$1,860,000	\$1,160,000	\$8,835,000
Funding Sources- Surface Water							
Operating	2007	2008	2009	2010	2011	2012	Total
	\$ 713,000	\$ 589,000	\$ 651,000	\$ 620,000	\$ 868,000	\$ 899,000	\$ 4,340,000
Bonds/Loans	\$1,173,000	\$ 969,000	\$ 1,071,000	\$ 1,020,000	\$ 1,428,000	\$ 1,479,000	\$ 7,140,000
SDC/SAD	\$ 391,000	\$ 323,000	\$ 357,000	\$ 340,000	\$ 476,000	\$ 493,000	\$ 2,380,000
Undetermined	\$ 23,000	\$ 19,000	\$ 21,000	\$ 20,000	\$ 28,000	\$ 29,000	\$ 140,000
Total	\$2,300,000	\$ 1,900,000	\$ 2,100,000	\$ 2,000,000	\$ 2,800,000	\$ 2,900,000	\$ 14,000,000

PARKS, RECREATION AND OPEN SPACE CAPITAL FACILITIES PLAN

2007- 2012 Inventory of Existing Facilities

The City of Renton is the primary provider of park and recreation services within the city limits. These services include parks, indoor facilities, open space areas and recreation programs. Other suppliers that provide facilities and services include the Renton School District and several private enterprises.

Figure 11-1 below is a summary of the amount of park and open space area provided by the City of Renton; provided by others within the City's Proposed Annexation Area (PAA) and the total for the overall Planning Area.

**Fig. 11-1
Park and Open Space Areas
Summary**

Type of Facility	Renton	PAA	Planning Area Total
Neighborhood Parks	97.37	20.20	117.57
Community Parks	130.36	93.36	223.72
Regional Parks	55.33	50.00	105.33
Open Space Areas	683.11	178.81	861.92
Linear Parks & Trails	12.04 Miles/ 1 acre	0.00	12.04/1
Special Use Parks & Facilities	<u>190.66</u>	<u>0.00</u>	<u>190.66</u>
TOTAL	<u>1157.83</u>	<u>342.37</u>	<u>1500.2</u>

Figures 11-2 and 11-3 on the following pages list the individual park and open space areas that comprise the categories summarized above. Figure 11-2 details Renton's Parks and Open Spaces by category and Figure 11-3 lists public land in Renton's PAA. The table lists the name of each park or open space, its size in acres, and its status as of January 2001.

Fig. 11-2
Public Park and Open Space Areas in Renton
Detailed Listing

Park	Acres	Status
<u>Neighborhood Parks (20)</u>		
Earlington Park	1.54	Developed
Glencoe Park	.42	Developed
Heritage Park	9.18	Developed
Jones Park	1.18	Developed
Kennydale Beach	1.76	Developed
Kennydale Lions Park	5.66	Developed
Kiwanis Park	9.00	Developed
Maplewood Park	2.20	Developed
Maplewood Roadside Park	1.00	Developed
North Highlands Park	2.64	Developed
Philip Arnold Park	10.00	Developed
Riverview Park	11.50	Developed
Sit In Park	0.50	Developed
Springbrook Watershed Park	16.00	Undeveloped
Sunset Court	0.50	Developed
Talbot Hill Reservoir	2.50	Developed
Thomas Teasdale Park	10.00	Developed
Tonkins Park	0.29	Developed
Tiffany Park	7.00	Developed
Windsor Hill Park	<u>4.50</u>	Developed
TOTAL	97.37 Acres	
<u>Community Parks (7)</u>		
Cedar River Park	23.07	Developed
Cedar River Trail Park	24.20	Developed
Highlands Park	10.40	Developed
Liberty Park	11.89	Developed
Narco Property	15.00	Undeveloped
Piazza & Gateway	0.80	Developed
Ron Regis Park	<u>45.00</u>	Developed
TOTAL	130.36 Acres	
<u>Regional Parks (1)</u>		
Gene Coulon Memorial Beach Park	<u>55.33</u>	Developed
TOTAL	55.33 Acres	
<u>Open Space Areas (10)</u>		
Black River Riparian Forest	92.00	Undeveloped
Cedar River Natural Area	237.00	Undeveloped
Cleveland Property	23.66	Undeveloped
Honey Creek	35.73	Undeveloped

Lake Street	1.00	Undeveloped
May Creek/McAskill	10.00	Undeveloped
May Creek Greenway	29.82	Undeveloped
Panther Creek Wetlands	73.00	Undeveloped
Renton Wetlands	125.00	Undeveloped
Springbrook Watershed	38.00	Undeveloped
Edlund/Korum Property	<u>17.90</u>	Undeveloped
TOTAL	683.11 Acres	

Linear Parks & Trails (9)

Burnett Linear Park	1.0 acre	Developed
Cedar River Trail	4.5 miles	Developed
Honey Creek Trail	1.0 miles	Developed
Springbrook Trail	2.0 miles	Developed
S.W. 16 th Trail	.5 miles	Developed
Garden/16 th /Houser	1.0 miles	Developed
Lake Washington Blvd	1.5 miles	Developed
Gene Coulon Park	1.5 miles	Developed
Ripley Lane	<u>.04 miles</u>	Developed
TOTAL	12.04 Miles/1 Acre	

Special Use Parks & Facilities (10)

Boathouse	4,242 s.f.	Developed
Carco Theatre (310 seats)	11,095 s.f.	Developed
Community Garden/Greenhouse	960 s.f./46 acres	Developed
Henry Moses Aquatic Center (including bldgs.)	58,088 s.f.	Developed
Highlands Neighborhood Center	11,906 s.f.	Developed
Ivar's Restaurant	1,540 s.f.	Developed
Kidd Valley Restaurant	2,150 s.f.	Developed
Kiwanis Park Neighborhood Center	1,370 s.f.	Developed
Liberty Park Skate Park	14,250 s.f.	Developed
Maplewood Golf Course	190 acres	Developed
Maplewood Golf Course/Restaurant/Pro Shop	15,508 s.f.	Developed
Maplewood Golf Course Driving Range	11,559 s.f.	Developed
North Highlands Neighborhood Center	4,432 s.f.	Developed
Philip Arnold Neighborhood Center	1,370 s.f.	Developed
Renton Community Center	36,000 s.f.	Developed
Renton Senior Activity Center	18,264 s.f.	Developed
Teasdale Park Neighborhood Center	1,370 s.f.	Developed
Tiffany Park Neighborhood Center	1,800 s.f.	Developed
Veterans Memorial Park	<u>0.2 acres</u>	Developed
TOTAL	195,904 s.f, 190.66 Acres	

CITY-WIDE TOTAL

1,157.83 Acres
12.04 Miles
195,904 Square Feet

Fig. 11-3
Public Park and Open Space Areas in Renton's Proposed Annexation Areas (PAAs)

Detailed Listing

Petrovitsky Park	<u>50.0 Acres</u>	Developed
Sub-Total (Community Parks)	50.0 Acres	
Maplewood Community Park Site	40.0 Acres	Undeveloped
Skyway Park	23.08 Acres	Developed
Boulevard Lane Park	<u>30.28 Acres</u>	Developed
Sub-Total (Community Parks)	93.36 Acres	
Sierra Heights Park	4.7 Acres	Developed
Maplewood Park	4.8 Acres	Developed
Cascade Park	<u>10.7 Acres</u>	Developed
Sub-Total (Neighborhood Parks)	20.2 Acres	
May Creek Greenway	150.0 Acres	
Renton Park	19.0 Acres	
Maplewood Heights	5.0 Acres	
Bryn Mawr	<u>4.81 Acres</u>	
Sub-Total (Open Space)	178.81 Acres	
Total, Public Park and Open Space		
Within Renton's Proposed		
Annexation Areas 342.37 Acres		
Lindberg/Renton Pool		
Total (Special Use Facilities)..... 1		

In addition to the park and open space areas, the city operates a number of specialized facilities as an ongoing component of the total recreational services it provides. Figure 11-4 which follows lists the specialized facilities owned by the city as well as those specialized public facilities within the city limits that are owned by others.

Fig. 11-4
Specialized Facilities within the
Renton City Limits

Number	Facility	Comments
<u>Ballfields</u>		
City-owned:		
1	Cedar River Park	
1	Highlands Park	
1	Kennydale Lions Park	
1	Kiwanis Park	
2	Liberty Park	2 lighted
1	Maplewood Park	Small Field
1	Ron Regis	Lighted
1	Philip Arnold Park	Lighted
1	Thomas Teasdale Park	
1	Tiffany Park	
	TOTAL	11 FIELDS
Within the city limits but owned by others:		
2	Hazen High School	
2	Highlands Elementary School	Small Fields
1	Hillcrest School	Small Field
4	Honeydew Elementary School	Small Fields
3	McKnight Middle School	
4	Nelson Middle School	Small Fields
4	Renton High School	
1	Talbot Hill Elementary	
1	Tiffany Park Elementary	
	TOTAL	22 FIELDS
Number	Facility	Comments
<u>Football/Soccer Fields</u>		
City -owned:		
1	Cedar River Park	
1	Highlands Park	
1	Kiwanis Park	
1	Philip Arnold Park	1 lighted
1	Ron Regis Park	1 lighted
1	Thomas Teasdale Park	
1	Tiffany Park	
	TOTAL	7 FIELDS
Within the city limits but owned by others:		
1	Hillcrest School	
2	Honeydew Elementary School	
1	Kennydale Elementary	
1	McKnight Middle School	
1	Renton High School	
1	Renton Stadium	1 lighted
	TOTAL	7 FIELDS

Tennis Courts

City-owned:

2	Gene Coulon Memorial Beach Park	
2	Highlands Park	2 lighted
2	Kiwanis Park	
3	Liberty Park	3 lighted
1	North Highlands Park	
2	Philip Arnold Park	2 lighted
3	Talbot Hill Reservoir	
2	Tiffany Park	
	TOTAL	17 COURTS

Within the city limits but owned by others:

4	Hazen High School	
4	McKnight Middle School	
2	Nelson Middle School	
5	Renton High School	
	TOTAL	15 COURTS

Swimming Pools

Within the city limits but owned by others:

1	Hazen High School	Indoor
	TOTAL	1 POOL

Level of Service

Standards for park and recreation levels of service were first established nationally based on "Standard Demand" and have been modified at state and local levels to meet local needs. The national level of service (LOS) standards were established by committees of recreation professionals based on practical experience in the field, and are felt to be most useful in quantifiable terms, i.e. acres of park land per population served. The most recognized standards are those developed by the National Recreation Park Association (NRPA). In 1983 that organization published a report titled "Recreation, Park and Open Space Standards" that is well recognized in the recreation field.

The Park CFP establishes a 2-tiered approach: 1) an overall LOS standard based on total population and total acreage; and 2) LOS standards for individual neighborhoods and for specific types of parks and facilities within parks. The overall LOS is a gauge of whether the City is meeting overall concurrence for GMA. The second tier identifies areas where deficiencies exist so the City can target its funds to eliminate those deficiencies while still maintaining overall LOS.

The proposed LOS standard for park and open space land established for Renton in its Comprehensive Park, Recreation and Open Space plan is 18.58 acres/1,000 population. The 2007 LOS in Renton is 19.84 acres/1,000 population. The LOS within Renton's Potential Annexation Areas (PAAs) is only 5.35 acres/1,000, which reduces the 2007 overall Planning Area LOS to 12.26 acres/1,000. Continued acquisition of park and open space lands will be needed as the City's residential growth continues within its existing boundaries, and as it expands into its underserved PAA's.

The recommended service levels for Renton were developed after discussions with City staff and the Board of Park Commissioners. They are based on participation ratios by which a community can estimate in quantifiable terms the number of acres or facilities required to meet the population demand. Attaching a standard to a population variable makes it easy to forecast future needs as the population grows. The table below identifies the current overall LOS in Renton and within Renton's planning area.

Fig 11-5**EXISTING LEVEL OF SERVICE (LOS) - OVERALL**

	Park & Open Space Land	Existing Population	LOS (Acres/1,000)
City of Renton	1,157.83	58,360	19.84
Renton's PAA's	342.37	64,000	5.35
Total Planning Area	1,500.2	112,360	12.26

Starting below, existing service levels and recommended standards by park types within Renton are given. Each park type compares the NRPA Standard to the existing service levels and the recommended standards. This information is provided to indicate how Renton's current level of service compares to national and local standards.

Figure 11-6

EXISTING LEVEL OF SERVICE (LOS) – BY PARK TYPE
Figures shown are in acres/1,000 population

Park and Open Space Areas**1. Neighborhood Parks****Definition:**

Neighborhood parks are small park areas (usually 2-10 acres in size) utilized for passive use and unstructured play. They often contain an open space for field sports, a children's playground, a multi-purpose paved area, a picnic area and a trail system. For heavily wooded sites, the amount of active use area is substantially reduced.

NRPA Standard	1-2 Acres/1,000 Population
Existing LOS (Renton):	1.7 Acres/1,000 Population
Existing LOS (Planning Area)	.32 Acres/1,000 Population
Recommended LOS Standard:	1.2 Acres/1,000 Population

Comments:

The recommended standard reflects the shifting emphasis on larger parks and open space recreational opportunities that cost less to maintain and operate than do neighborhood parks.

2. Community Parks**Definition:**

Community parks are traditionally larger sites that can accommodate organized play and contain a wider range of facilities. They usually have sport fields or other major use facilities as the central focus of the park. In many cases, they will also serve the neighborhood park function. Community parks generally average 10-25 acres in size with a substantial portion of them devoted to active use. Sometimes, smaller sites with a singular purpose that maintain a community-wide focus can be considered community parks.

NRPA Standard:	5-8 acres/1,000 population
Existing LOS (Renton):	2.25 acres/1,000 population
Existing LOS (Planning Area):	1.46 acres/1,000 population
Recommended LOS Standard:	2.5 acres/1,000 population

Comments:

The low existing ratio reflects a past emphasis within Renton on neighborhood parks. While the recommended standard is well below the NRPA standard, it represents a shifting emphasis to community parks.

3. Regional Parks**Definition:**

Regional parks are large park areas that serve geographical areas that stretch beyond the community. They may serve a single purpose or offer a wide range of facilities and activities. In many cases they

also contain large areas of undeveloped open space. Many regional parks are acquired because of unique features found or developed on the site.

NRPA Standard:	5-10 acres/1,000 population
Existing LOS (Renton:	.95 acres/1,000 population
Existing LOS (Planning Area):	.78 acres/1,000 population
Recommended Standard:	1.08 acres/1,000 population

Comments:

Renton has the potential for developing another regional park located in the Cedar River corridor. The recommended standard of 1.08 acres per 1,000 population recognizes the potential for creating a Cedar River Regional Park consisting of the following Special Use Parks: Cedar River Park, Maplewood Roadside Park, Maplewood Golf Course, and the Cedar River Property.

4. Open Space Areas

Definition:

This type of park area is defined as general open space, trail systems, and other undeveloped natural areas that includes stream corridors, ravines, easements, steep hillsides or wetlands. Often they are acquired to protect an environmentally sensitive area or wildlife habitats. In other cases they may be drainage corridors or heavily wooded areas. Sometimes trail systems are found in these areas.

Existing LOS (Renton)	11.71 acres/1,000 Population
Existing LOS (Planning Area):	2.8 acres/1,000 Population
Recommended LOS Standard:	12.7 acres/1,000 Population

Comments:

The majority of this type of land is wetlands, steep slopes, or otherwise not suitable for recreational development.

5. Linear Parks

Definition:

Linear parks are open space areas, landscaped areas, trail systems and other land that generally follow stream corridors, ravines or other elongated features, such as a street, railroad or power line easement. This type of park area usually consists of open space with development being very limited. Trail systems are often a part of this type of area.

Existing LOS (Renton):	.02 acres/1,000 Population
Existing LOS (Planning Area):	0 acres/1,000 Population
Recommended Standard:	0.3 acres/1,000 Population

Comments:

The majority of linear park land is found along the banks of the Cedar River and Honey Creek. There are other opportunities for linear parks utilizing utility corridors.

6. Special Use Parks and Facilities

Definition:

Specialized parks and facilities include areas that generally restrict public access to certain times of the day or to specific recreational activities. The golf course and major structures are included in this category.

Existing LOS (Renton):	3.7 acres/1,000 Population
Existing LOS (Planning Area):	0 acres/1,000 Population
Recommended Standards:	0.8 acres/1,000 Population

7. Total Park Land

Presently, Renton has 1157.83 acres of total park land within the city boundaries. Together with another 342.37 acres of public park and open space land within Renton's PAAs (Potential Annexation Areas), the total amount of park and open space land within Renton's planning area is 1,500.2 acres.

NRPA Standard:	15-20 acres/1,000 Population
Existing LOS (Renton):	19.84 acres/1,000 Population
Existing LOS (Planning Area):	5.35 acres/1,000 Population
Recommended LOS Standard:	18.58 acres/1,000 Population

Comments:

While the recommended standard of 18.58 acres per 1,000 population seems high, most of the acreage is in the open space category. Most of this land is undevelopable as steep hillsides, wetlands, or environmentally sensitive areas.

Specialized Facilities

Below are the recommended levels of service for specialized recreation facilities. In addition to the NRPA standard and the existing facility ratio, an estimate of the participation level in Renton compared to the average for the Pacific Northwest is also provided. The existing inventory includes City-owned facilities as well as those facilities within the city limits owned by other public entities.

1. Ballfields (Includes baseball and softball fields)

NRPA Standard:	1 field per 2,500 population
Existing Participation:	Average
Existing Inventory:	20 fields *
Existing Facility Ratio:	.9 field per 2,500 population
Recommended Standard:	1 field per 2,500 population

* Small fields were excluded for purposes of evaluation.

2. Football/Soccer Fields

NRPA Standard:	1 field per 10,000 population
Existing Participation:	75 % below average
Existing Inventory:	26 fields
Existing Facility Ratio:	1.3 fields per 3,000 population
Recommended Standard:	1 field per 3,000 population

Comments

Because of the extremely high existing facility ratio and the below average participation rate, the recommended standard--while substantially above the NRPA standard—is roughly the same as the existing facility ratio.

3. Tennis Courts

NRPA Standard:	1 court per 2,000 population
Existing Participation:	15 % below average
Existing Inventory:	32 courts

Existing Facility Ratio:	1.4 courts per 2,500 population
Recommended Standard:	1 court per 2,500 population

Comments

Based on the substantially above average existing facility ratio, the recommended standard is almost equivalent to the existing facility ratio.

4. Swimming Pools (indoor)

NRPA Standard:	1 pool per 20,000 population
Existing Participation:	Average
Existing Inventory:	1 indoor pool
Existing Facility Ratio:	..68 per 40,000 population
Recommended Standard:	1 pool per 40,000 population

5. Walking Trails

Existing Participation:	16% above average
Existing Inventory:	9.0 miles (off-street)
Existing Facility Ratio:	.15 miles per 1,000 population
Recommended Standard:	.20 miles per 1,000 population

Comments

The recommended standard reflects a strong local interest in walking trails and the fact that the city directed its efforts to other areas until recent years.

Needed Capital Facilities and Funding Plan, 2007- 2012

Figure 11-7 on the following page shows the projects which may need to be begun over the next six years to achieve the recommended level of service standards if the forecast growth -- and therefore, demand -- occurs. Figure 11-8 also includes potential funding sources for each project, where known.

Fig. 11 - 7
Parks Capital Facilities
2007- 2012

Table 11-4							
Items for Development	2007	2008	2009	2010	2011	2012	Total
Black River Riparian Forest			\$85,000	\$100,000	\$200,000	\$2,000,000	\$2,385,000
Sam Chastain Waterfront Trail	\$500,000	\$4,000,000					\$4,500,000
Family Aquatic Center	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$720,000
Grant Matching Program	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$700,000
Maplewood Community Park Development		\$100,000	\$300,000	\$3,000,000		\$3,000,000	\$6,400,000
New Maintenance Facility	\$335,000	\$4,000,000	\$2,000,000				\$6,192,000
North Highlands Community Center		\$250,000	\$1,750,000				\$2,000,000
Parks Long Range Plan	\$60,000						\$60,000
Regis Park Athletic Field Expansion		\$200,000	\$2,300,000				\$2,500,000
Springbrook Trail Missing Link	\$1,600,000						\$1,600,000
Tiffany Park Recreation Building	\$15,000						\$15,000
Total	\$2,830,000	\$8,770,000	\$6,655,000	\$3,320,000	\$420,000	\$5,220,000	\$27,072,000

Fig. 11 - 8
Parks Capital Facilities
2007- 2012

Table 11-5							
Funding Sources	2007	2008	2009	2010	2011	2012	Total
Operating	\$2,755,000	\$ 220,000	\$ 220,000	\$ 220,000	\$ 220,000	\$ 220,000	\$ 3,855,000
Bond Proceeds		\$ 3,100,000	\$ 500,000				\$ 3,600,000
Mitigation	\$2,265,000						\$ 2,265,000
Undetermined	\$ 181,000	\$ 7,820,000	\$ 7,150,000	\$ 4,512,000	\$ 941,000	\$ 5,631,000	\$ 26,235,000
Total	\$5,201,000	\$ 11,140,000	\$ 7,870,000	\$ 4,732,000	\$ 1,161,000	\$ 5,851,000	\$ 35,955,000

GENERAL GOVERNMENT CAPITAL FACILITIES PLAN

2007- 2012 FIRE DEPARTMENT CAPITAL FACILITIES

Inventory of Existing Facilities

The Renton Fire Department provides fire protection services from six locations: Fire Department Headquarters is located on the sixth floor of City Hall at 1055 Grady Way; Station 11 which is in the downtown area and serves the central part of the city; Station 12 which is located in Renton Highlands and serves the north and east portions of the city; Station 13 which is located in the Talbot Hill area and serves the southeast portion of the city; and Station 14 is located at Lind & S. 19th Street and serves the South portion of Renton. Additionally, King County Fire District 25 operationally is part of the Renton fire protection system; it serves the east portion of the city as well as portions of King County. Figure 13-1 on the following page shows the locations of the fire stations.

Currently Station 11 is staffed by 9 personnel and is equipped with one engine company, one ladder company, one aid car and one command unit. Station 12 is staffed by 5 personnel and is equipped with one engine company and one aid car. Stations 13, 14, and 16 are staffed by three personnel and equipped with an engine and an aid unit.

The City's water system is also a critical component of fire protection service. Currently all areas of the city are served by the city water system.

Level of Service

Historically, level of service for fire suppression has been measured in a variety of qualitative and quantitative terms. However, in the city's Fire Department Master Plan (1987) the primary level of service criteria were response time and fire flow. In the next capital facilities plan, there will be a shift in the placement of fire stations with a goal of providing a city wide fire and emergency service coverage net that maintains a 90th percentile response goal. Meeting this goal will ensure that all citizens can expect the same response time 90% of the time. Response time is an important criterion for level of service because there is a direct relationship between both how long a fire burns and how long a person can survive with their heart beating. The ultimate goal of the fire and emergency service system is the preservation of human life.

Obviously, the need to extinguish fires is also a criterion for measuring the level of service for the fire and emergency services system, as fire is one of the more likely causes of significant property damage in the city. Fire flow refers to the amount of water that is available to spray on a fire and extinguish it. Understandably, water is an essential element for fire suppression, and the hotter a fire, the more water that must be available to extinguish it. Determining what is adequate fire flow depends upon a building's type of construction, floor area, and use. For example, adequate fire flow in the city's water system for a single-family wood frame house is 1,000 gallons per minute (gpm) whereas adequate fire flow for a shopping center or an industrial park is approximately 4,500 gpm.

The third aspect of establishing level of service is personnel. Having trained firefighters in sufficient numbers is crucial to putting out a fire safely and efficiently. The city strives to comply with national standards relative to the staffing of fire apparatus as it is the placement of personnel at the location of the incident that for the basis for the success of the fire and emergency service delivery system.

According to national standards:

1. Acceptable response time is defined as having the first responding unit arrives on the incident scene in within five minutes of receipt of the response 90% of the time.
2. Acceptable response time is for the basic firefighting force (15 personnel) is nine minutes from the receipt of the response 90% of the time.

3. Acceptable fire flow is defined as having water available to all parts of the city in sufficient quantity and pressure to extinguish the worst-case fire in an existing or projected land use.
4. Acceptable staffing is defined as having four firefighters on each piece of firefighting apparatus.

Though the goal of the city is to comply with nationally recognized standards, the ability to meet these standards is subject to resource availability at the time of an incident, rather than an absolute.

Needed Capital Facilities and Funding Plan 2007- 2012

With the exception of a few isolated small areas of the city, the five minute response time level of service standard is being met 63.8% of the time, which is 70.8% of the national standard. Similarly, the adequate fire flow level of service standard is being met city-wide. Generally, fire flows are adequate throughout the city, a long-range water system plan is being implemented to upgrade the few low fire flow areas, and development standards and review procedures are in place, which require that necessary fire suppression measures are made available for all new construction.

In the east Renton area the agreement with Fire District 25 whereby the city has assumed operational control of that facility coupled with Station 12 and the water system plan for the area should assure that both response time and fire flow standards will be maintained.

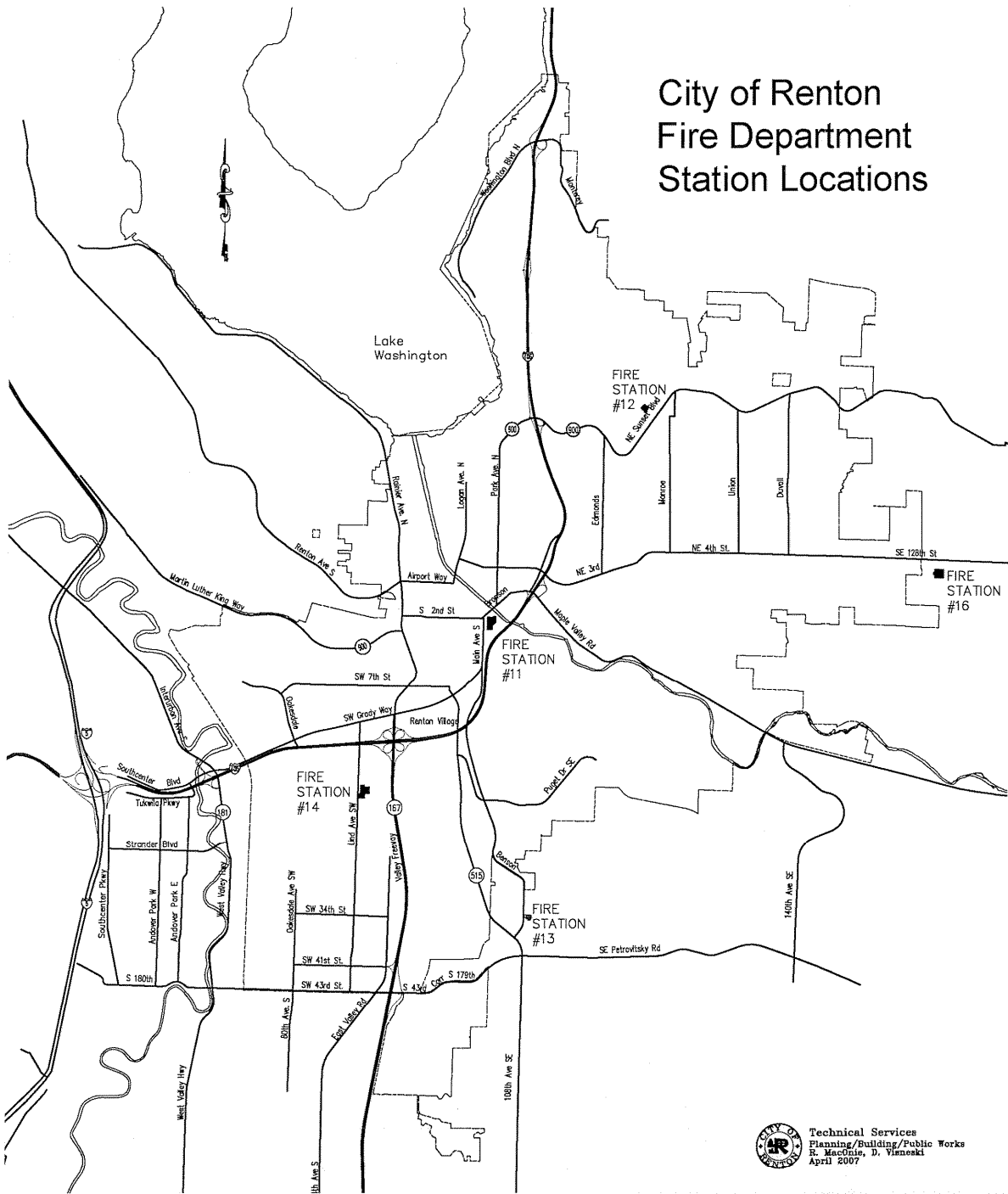
In the Kennydale area a new station 15 will be constructed over the next six years. The station will be staffed with four firefighters, seven days a week. This means an additional fifteen firefighters along with the purchase of equipment. The total project includes the purchase of land, design, construction, hiring personnel, and purchase of equipment. Presently the northerly portion of the area is within the ten-minute response time standard but outside of the five-minute response time standard for Station 12.

Over the next six years, some single family and multi-family growth is projected for the Kennydale/Highlands area, as is some employment growth. This growth would increase somewhat the importance of providing improved service to the area in the near term. Given the residential and employment growth projected for the area after the year 2006, the importance of taking actions to improve the five-minute response time coverage increase substantially during that period. Land has been acquired to construct Fire Station #15 in the Kennydale area and there could be a need for an additional station in the eastern portion of the city on or near Duvall Avenue in north of NE 4th. The Fire Department is in the process of acquiring software that will help with this analysis. The City also anticipated improvements to Valley Communications Facilities over the next six years.

Station 14 was built in the Valley industrial area to help handle the projected employment and multi-family growth for the area. In addition, there is still a need for a new facility for Station 13 due to its physical limitations in terms of its ability to accommodate the necessary equipment and personnel to maintain the current level of service standards as growth occurs.

Station 13 was built as a temporary facility, until a current level of service standards as growth occurs. King County Fire District #40 has constructed a new state of the art facility in the Benson Hill potential annexation area. This will be inside Renton City limits should an annexation of this area occur. The Fire Department is in discussions with King County Fire district #40 regarding a potential contract that would provide service to the district in the same way that services are provided to King County Fire District #25.

Fig. 13-1
Existing and Proposed Fire Stations



2007- 2012 ECONOMIC DEVELOPMENT CAPITAL FACILITIES PLAN

The Neighborhood Grant Program currently provides \$50,000 to be distributed in small matching grants to organized associations that from recognized geographic neighborhoods in Renton. The grant projects must be a benefit to the public, create physical improvements, build and enhance a neighborhood feature and be within Renton City limits. Over the next six years, the funding for this program is expected to increase to \$110,000 by 2012.

\$1.5 million dollars of funding for infrastructure implementation in the Highlands Study Area has been set aside in City reserves. New development in this area will require additional investments to stimulate redevelopment.

Fig. 13-2 General Government Capital Facilities
2007-2012

Table 13-1		2007	2008	2009	2010	2011	2012	Total
Items for Development								
Fire Station 13			\$990,000	\$390,000				\$4,890,000
Fire Station 15			\$350,000	\$4,500,000				\$4,850,000
Information Services Division		\$1,317,000	\$1,165,000	\$1,081,000	\$719,000	\$1,025,000		\$5,306,000
Neighborhood Grant Program		\$50,000	\$75,000	\$75,000	\$90,000	\$90,000	\$110,000	\$490,000
Transportation Study		\$300,000						
Total		\$1,667,000	\$2,555,000	\$9,531,000	\$769,000	\$1,075,000	\$50,000	\$15,836,000
Funding Sources								
Operating		\$1,667,000	\$1,215,000	\$1,131,000	\$769,000	\$1,075,000	\$50,000	\$5,906,000
Undetermined			\$1,340,000	\$8,400,000				
Total		\$1,667,000	\$2,555,000	\$9,531,000	\$769,000	\$1,075,000	\$50,000	\$9,740,000